Original: February 8, 2007
Updated: November 29, 2010

Mark,

I thought it would be worth sending you an outline summary of the work that the technology department has done since taking over responsibility for Town technology resources.

We provided technical support for all town departments, including 24x7x365 support for the public safety departments. We also provide email service and web-site update support. In addition, we did many improvement/replacement projects, as shown below. It is important to note that **all of this work was done at no additional cost to the Town**—in fact, it was done while saving the Town money.

When we assumed the responsibility for Town IT in 2003, the Town was spending about $120,000 per year on contracted service. We replaced that contracted service with a technician and a stipend for my time, which reduced the direct IT support cost by about $60,000 per year. This change alone has saved the Town about $420,000 to date.

The IT department was funded by "sweeping" the IT budget lines of the various departments into the IT accounts, so that the funds used for IT are managed centrally. This has allowed the large number of improvements shown below to be funded **without any additional cost to the Town.**

Town Hall
- Replaced "white-box" servers with industrial strength HP/COMPAQ servers with redundancy features. They have since been updated to Server 2003 and the latest version of Citrix.
- Implemented KVS over Citrix, allowing improved performance and easy home/remote access. We have since added the Citrix remote access gateway, providing users, such as Bill Rowe, with secure access to Town applications. We have also since updated KVS to add KVS Enterprise, the Oracle version of KVS. We do all regular updates to KVS software and support Town KVS users.
- Completely replaced the entire building network, which was made up of home quality equipment, with up to date Cisco hardware
- Replaced the 500 KB Internet connection with a 7.5 MB Internet connection at no additional expense. We have since moved to a 50MB FIOS connection, which is still less expensive that the 500KB connection formerly used by the Town.
- Replaced all PC's, particularly the "white-box" PC's. We are currently in the process of the second refresh of Town Hall desktop machines and printers.
- Provided laptops for key town administrators. We have since replaced several of these laptops.
- Provided an LCD projector. We have since purchase additional LCD projectors
- Replaced the limited email system with First Class. We recently added accounts and structure for the entire SPD.
- Replaced many printers and related equipment
- Installed a GIS web server
- Updated Office and anti-virus software
- Suggested, in 2003, the use of the KVS water billing software to solve the water billing issues. The suggestion was never acted upon.
- Suggested, in 2003, the use of the KVS general receipts module to replace the various antiquated programs used for various permits, licenses, etc. The suggestion was never acted upon.
- Suggested, in 2005, the use of LaserFiche for document management and "paperless" data storage. The suggestion was never acted upon.

- Suggested on multiple occasions that the Town adopt on-line billing for tax collections. The suggestion has just recently been acted upon.
- Suggested on multiple occasions that we look at combining various Town/School systems/resources. Examples are: the town and school use different financial software, the police and fire department both have dispatchers and dispatch software—many towns have moved to central dispatch, etc. The suggestions, which could provide considerable savings to the Town/Schools, were never acted upon.
- Suggested that the Town take advantage of the school copier contract and standardize copiers across the Town. While this was never adopted as a policy, it has been happening informally.

VNA
- Implemented a network firewall to block access to VNA computers, as required by HIPPA. We recently replaced this firewall with a newer model.
- Updated/corrected server issues. We recently updated and converted the primary software application used by the VNA and added web-based Medicare data submission, saving the VNA extensive amounts of time when submitting Medicare data.
- Updated/corrected PC issues. We plan to replace all VNA computer equipment this year and add two additional workstations
- Installed anti-virus software

DPW
- Installed hard drive backup system, replacing the troublesome tape system
- Updated the servers. We have since replaced the server with an industrial strength HP server with redundant data and power.
- Re-connected the fiber connection and canceled the point to point T1, saving $2400/year
- Contracted with ECCM to implement a Voice over IP telephone connection to the Town Hall
- In-process of replacing all PC's. We just completed a second complete PC refresh for the DPW.
- Updating the server to Server 2003 is scheduled for this year. As noted above, the server was recently replaced.

Police
- Installed completely new HP/COMPAQ server setup, replacing the "white box" server
- Installed new Cisco network hardware, replacing a mixture of home networking equipment
- Replaced all PC's, several printers, and added PC's/printers
- Installed hard drive backup system, replacing the troublesome tape system
- Voice over IP telephone connection to Town Hall scheduled for this year
- Supported installation of new electronic fingerprinting system
- Supported the complete rebuild of the dispatch area
- Installed IMC Mobile with Toughbooks in all cars
- Installed two Smartboards for training use
- Supported installation of barcoding for evidence tracking
- Added email accounts and email organizational structure for all police personnel

Fire
- Updated servers. We have since replaced the server with an industrial strength HP server with redundant data and power.
- Updated network. We have since replaced the network hardware with Cisco and replaced the Station 1 – Station 2 routers with updated Cisco routers
- Replaced most PC's and several printers. We recently completed a second refresh of Fire Department workstations, replacing all work stations.
- Installed FileMaker server and eliminated dispatch system issues

- Re-configured routers that connect the two stations via the T1 and eliminated the problems with this connection. As noted above, we since replaced these routers.
- Updated FirePoint software
- Installed hard drive backup system, replacing the troublesome tape system
- Voice over IP telephone connection to Town Hall scheduled for this year. The voice over IP phone system has since been installed

Library
- Replaced many computers. We recently refreshed many of the PC's in the library
- Updated computers to Windows 2000. We since updated to XP
- Installed antivirus software
- Connected the library to the Town Internet connection, improving performance for library patrons. We have since moved the library over to their own Comcast connection, which is free, and installed a firewall
- Implemented a CD server to serve CD content to Children's area
- Replaced/ added printers
- Replaced LCD projector
- Implemented wireless service for patrons using the Comcast Internet connection
- Voice over IP telephone connection to Town Hall scheduled for this year. This work has been completed.
- Added wireless to the Wales French room
- Added a wireless netbook cart (15 netbooks)
- Added a Smartboard in the Wales French room

Youth Commission
- Implemented a T1 connection to the Town Hall, enabling Internet, email, and telephone access
- Contracted with ECCM to implement Voice over IP telephone system
- Updated server to Server 2003
- Updated PC's
- Added printers
- Updated network
- Installed hard drive backup system, replacing the troublesome tape system
- We have since moved/combined all of this equipment with the COA equipment

Senior Center
- Implemented a T1 connection to the Town Hall, enabling Internet, email, and telephone access
- Contracted with ECCM to implement Voice over IP telephone system
- Updated server to Server 2003
- Replaced many PC's
- Added printers
- Updated network
- Implemented use of web site calendar for Senior Center events
- Installed hard drive backup system, replacing the troublesome tape system
- Added wireless network
- Updated network wiring, server, and PC's in support of COA-SYC combination

Overall
- Installed R911 system. Training will be scheduled for this fall. Recently replaced this system with OneCallNow on the school side—waiting for the Town's decision re: call notification systems.
- Contracted for a town-wide wireless network survey, with the goal of eliminating $24,000/year in leased line costs. A second survey revealed that wireless was not practical, as the Town has no agreement for space on cell towers. We then prepared a

proposal to run fiber between Town/School buildings not currently on our fiber network. The recent Town Meeting approved funding for this project. Also suggested to the then Town Manager that the Town should change permitting for cell tower to require a Town space allocation on the towers, which as never been acted on. The fiber project is nearly completed, which will allow us to discontinue the use of 7 T1 circuits, a savings of $16,800 annually.

- Moved all town email users to First Class and added many new accounts (the old system was limited to 100 accounts). We now have email accounts for virtually all Town employees, at no cost to the Town.

- Moved town web site to free web hosting, saving $3,000 per year and providing direct update access. We have since rebuilt the web site on FirstClass, providing a web site that is easy for each department to update without any knowledge of web publishing. This work was done at no cost to the Town and there are no annual subscription or maintenance costs.

- Hired a consulting firm to examine Town and School telephone service for potential savings. This work resulted in an annual savings of approximately $36,000 to the Town/schools. The Town's telephone lines and cell phones were not on the state contract.

- The process of connecting the Town and School phone systems is being worked on right now. This will allow extension dialing between any town or school phone over our private data network, eliminating the use of 2 telephone lines, and the resulting measured business unit charges for each internal call. We expect this work to allow a significant reduction in the number of outside telephone lines.

The partnership between the Town and schools relative to IT support has been very successful, both financially and in terms of the quality of IT support. We have completely rebuilt the Town's IT infrastructure, from the building networks up, while achieving significant savings to the Town. The annual savings realized by our work have essentially paid for the department. This partnership was relatively unique when we started in 2003, but is quickly becoming the norm across the state, as Towns seeks ways to improve efficiencies and reduce costs.